

# Quantum Capacities and Non-commutative $L_p$

Monday October 19 – 10h30-11h15

M. Junge

In this joint work with Gao, LaRacurente and Palazuelos we investigate how to use vector-valued non-commutative  $L_p$  norms for calculations of different capacities associated with a quantum channel. The capacities of quantum channels are in general very difficult to compute because of superactivation. Two channels with 0 capacity combined have positive capacity. The talk will provide basic concepts on capacities and channels and the interesting geometry of the Stinespring space.